

WHAT IS CLAIMED IS:

[c01] A method comprising the steps of:

accessing a billing record of the customer from a carrier access billing system, wherein the billing record is accessed from the multiple customer operations units and the multiple revenue accounting offices, and wherein the carrier access billing system maintains billing records for wholesale customers that purchase blocks of telephone capacity, and

compiling the billing record to create a merged billing record; and

processing the merged billing record to create an access customer analysis database comprising data associated with at least one of a customer, a service agreement, a service usage, a service rate, service availability, a type of service, and a service region.

[c02] The method of claim 1,<sup>1</sup> further comprising the steps of:

accessing the access customer analysis database; and

creating an access carrier service rate and billing detail based on the merged billing record, the access carrier service rate and billing detail comprising data associated with at least one of a customer, a service agreement, a service usage, a service rate, service availability, a type of service, and a service region, wherein the access carrier service rate and billing detail provides at least one of a administrative report, a sales proposal, a customer billing dispute resolution report, a product analysis and development tool, an update to a discount plan, an input of a billing adjustment, a modification to billing data, and a modification to rate data.

[c03] The method of claim 2,<sup>1</sup> wherein step of creating the access carrier service rate and billing detail comprises presenting an interactive graphical user interface for selecting at least one of a group of accounts under one access carrier customer, a relation between a plurality of access carrier customers, and a unique access carrier customer-based information.

- [c04] The method of claim 2, wherein step of creating the access carrier service rate and billing detail comprises presenting an interactive graphical user interface for selecting at least one of a customer identifier, a service agreement, a service usage, a service rate, service availability, a type of service, and a service region.
- [c05] The method of claim 2, wherein step of creating the access carrier service rate and billing detail comprises presenting an interactive graphical user interface for associating at least one of a customer identifier, a service agreement, a service usage, a service rate, service availability, a type of service, and a service region.
- [c06] The method of claim 2, further comprising the steps of:
  - reporting the access carrier service rate and billing detail of the customer.
- [c07] The method of claim 2, further comprising the step of:
  - using the access carrier service rate and billing detail to manage an access carrier rate and billing plan.
- [c08] The method of claim 7, further comprising the step of:
  - displaying at least one of alternate promotional codes, rate plans, and service agreements.

[c09] The method of claim 8, wherein the step of displaying at least one of alternate promotional codes, rate plans, and service agreements further comprises the steps of:

retrieving, from the access customer analysis database, data relevant to terms and conditions of the access carrier service rate and billing detail;

calculating a discount based on the data relevant to the terms and conditions;

creating an other-charge-and-credit based on the discount; and

passing the other-charge-and-credit to the carrier access billing system for inclusion on the access carrier rate and billing plan.

[c10] The method of claim 1, further comprising the steps of:

accessing a regional rate record of a customer from a local exchange routing guide information system, wherein the regional rate record is accessed from multiple customer operations units and multiple revenue accounting offices, and wherein the local exchange routing guide information system maintains routing and rate records for terminating a telephone call to an appropriate telephone number at a proper rate,

compiling at least one of the regional rate record and the billing record to create a merged rate and billing record;

processing the merged rate and billing record to create the access customer analysis database;

accessing the access customer analysis database;

creating the access carrier service rate and billing detail based on the merged billing record;

retrieving, from the access customer analysis database, data relevant to terms and conditions of the access carrier service rate and billing detail;

calculating a discount based on the data relevant to the terms and conditions;

creating an other-charge-and-credit based on the discount; and

passing the other-charge-and-credit to at least one of the local exchange routing guide information system and the carrier access billing system for inclusion on the access carrier rate and billing plan.

[c11] A system comprising:

a carrier access billing system, wherein the carrier access billing system maintains billing records for wholesale customers that purchase blocks of telephone capacity;

a local exchange routing guide information system, wherein the local exchange routing guide information system maintains routing and rate records for terminating a telephone call to an appropriate telephone number at a proper rate;

a data model for building an access customer analysis database that

interfaces with the carrier access billing system and the local exchange routing guide,

accesses a billing record of the customer from the carrier access billing system, wherein the billing record is accessed from the multiple customer operations units and the multiple revenue accounting offices,

uses business rules to automatically compile the billing record to create a merged rate and billing record, the merged rate and billing record associated with at least one of a customer identifier, a service agreement, a service usage, a service rate, service availability, a type of service, and a service region,

creates and maintains an access carrier analysis database of the merged rate and billing record,

interfaces with an access carrier service rate and billing details management application, and

supports online tasks and offline data maintenance and exchange.

- [c12] The system of claim 11', wherein the access carrier service rate and billing details management application:

creates and maintains a selected view associated with one or more compiled rate and billing records, the selected view comprising compiled rate and billing records associated with at least one of a customer, a service agreement, a service usage, a service rate, service availability, a type of service, and a service region, and

provides means to establish, monitor, take action on, and report on a customer term and condition of the compiled rate and billing record.

- [c13] The system of claim 11', wherein the access carrier service rate and billing details management application comprises an online portion having a graphical user interface, an application server, and a database server.

- [c14] The system of claim 11', wherein the access carrier service rate and billing details management application comprises an online portion having a graphical user interface and a database server.

- [c15] The system of claim 11, wherein the graphical user interface is displayed on a client workstation.

- [c16] The system of claim 15, wherein the client workstation comprises at least one of the following:

- a wireless communications device,
- a mobile phone,
- a cellular phone,
- a WAP phone,
- a satellite phone
- a computer,
- a modem,

a pager,  
a digital music device,  
a digital recording device,  
a personal digital assistant,  
an interactive television,  
a digital signal processor, and  
a Global Positioning System device.

[c17] The system of claim 13, wherein the application server resides on a UNIX-based system.

[c18] The system of claim 13; wherein the database resides on a UNIX-based system.

[c19] The system of claim 13, wherein the application server resides on a WINDOWS®-based system.

[c20] The system of claim 13, wherein the database resides on a WINDOWS®-based system.

[c21] A system comprising:

an application server containing an application server program; and  
a database server containing an access customer analysis database,

wherein in response to a request from a client system for an access carrier service rate and billing detail, the application server program retrieves information from the access customer analysis database, the application server program performs any required business logic, the application server program returns the information to the client system,

wherein the application server contains business applications and legacy applications,

wherein the business applications comprise an access carrier service rate and billing details manager application, and wherein the legacy applications comprise a local exchange routing guide and a carrier access billing system,

wherein the carrier access billing system maintains billing records for wholesale customers that purchase blocks of telephone capacity, and

wherein the information retrieved from the access customer analysis database comprises at least one of

a billing record from the carrier access billing system,  
network configuration detail from the local exchange routing guide, and  
a merged regional rate record and billing record, the merged regional rate and billing record compiled using a data model of business rules.

**[c22]** A system comprising:

a client system containing a client program; and  
a database server containing an access customer analysis database,

wherein in response to a user request for an access carrier service rate and billing detail, the client program retrieves selected information from the database, the client program performs any required business logic, and the client program formats and displays the access carrier service rate and billing details on a screen for the user,

wherein the client program comprises an access carrier service rate and billing details manager application, and wherein the legacy applications comprise a local exchange routing guide and a carrier access billing system,

wherein the carrier access billing system maintains billing records for wholesale customers that purchase blocks of telephone capacity, and

wherein the information retrieved from the access customer analysis database comprises at least one of

- a billing record from the carrier access billing system,
- network configuration detail from the local exchange routing guide, and
- a merged regional rate record and billing record, the merged regional rate and billing record compiled using a data model of business rules.